Note: The following clinical information regarding color zones has been provided as guidelines only. They follow the recommendations of the National Heart, Lung, and Blood Institute, National Asthma Education Program, Expert Panel Report - 1991.

**GREEN** - No asthma symptoms are present and the routine treatment plan for maintaining control can be followed. For patients on chronic medications, consistent readings in the green zone may indicate an opportunity to consider a reduction in medications.

**YELLOW** - An acute exacerbation may be present and a temporary increase in medication may be indicated. Alternatively, the overall asthma may not be under sufficient control and maintenance therapy may need to be increased.

**RED** - An immediate bronchodilator should be taken and the clinician should be notified if PEFR measurements do not return immediately and stay in yellow or green zones.

Use the PEAK-AIR under the guidance and supervision of a physician or healthcare professional. Contact this person if you note a downward change in your readings which may indicate a worsening of your condition.

#### **BENEFITS OF PEAK FLOW MONITORING**

- · Can aid in the early detection of an impending asthma attack.
- · Provides measurement of reduced respiratory capacity such as during an allergic reaction.
- Easy self-administration of the peak flow test can uncover harmful effects of air pollution and environmental or occupational hazards.
- · Portable convenience package includes a reusable mouthpiece and a peak flow diary.

Distributed by:

## OMRON HEALTHCARE, INC.

300 Lakeview Parkway Vernon Hills, Illinois 60061 (800) 634-4350

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Made in USA LT-03002-001 PEAKON Home Use Peak Flow Meter PF9940 PEAK-AIR

OMRON

Please read all the information in this package insert before using the PEAK-AIR Flow Meter.

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## INTRODUCTION TO THE PEAK-AIR

The PEAK-AIR is a portable device for the measurement of peak expiratory flow rate (PEFR), which is the fastest speed a person can blow air out of the lungs after taking as big a breath as possible. "Peak expiratory flow rate" is a simple measure of the flow of air that can tell you how well you are breathing.

Daily measurements of PEFR can provide information to you and your doctor on small changes in your lung function, which can often prevent the onset of an asthma attack. Your doctor will assist you in learning to properly perform the test and record the results, as well as providing a treatment plan based upon the peak flow measurements.

A written record of your peak flow measurements (see the "Peak Flow Diary" enclosed in this package) should be kept by you and reviewed by your physician or healthcare professional.

#### CAUTION

- When using the PEAK-AIR Flow Meter to monitor lung conditions such as asthma, the user should be under the guidance and supervision of a physician or healthcare professional for assistance in monitoring the results. Contact this person if you note a downward change in your readings, which may indicate a worsening of your condition.
- · Instructions should be followed carefully to insure accurate measurements.
- · Consult your physician or healthcare professional with any questions.
- No matter what your PEAK-AIR Flow Meter indicates, if you have signs and symptoms such as chest tightness, shortness of breath, coughing or wheezing, contact your physician or healthcare professional.
- · For single patient use only.

## HOW TO CLEAN YOUR PEAK-AIR PEAK FLOW METER

Weekly washing is recommended. The PEAK-AIR and the plastic mouthpieces may be hand washed. When hand washing, thoroughly drain and air dry the peak flow meter. It is not recommended to use solvents or strong cleaning solutions. Use only soap and water. DO NOT BOIL. DO NOT AUTOCLAVE.

#### WARRANTY

The PEAK-AIR is covered by a three year warranty. If found to be defective under normal use, the unit will be replaced free of charge. This product and its accompanying literature meet the National Institutes of Health, National Heart, Lung and Blood Institute recommendations for peak flow meters. (Division of Lung Diseases, National Heart, Lung and Blood Institute, National Institutes of Health, Public Health Service, U.S. Department of Health and Human Services: "Statement on Technical Standards for Peak FLow Meters," NIH Publication No. 92-2113a.) This publication includes documentation, accuracy and reproducibility requirements. The PEAK-AIR and this pamphlet have been designed to meet these rigorous standards.

Age:	Sex:		Height:	
Average Baseline F	PEFR (liters per minu	te):		
Green Zone:		to		
Yellow Zone:		to		
Red Zone:		to		
Comments:			-	

#### HOW TO USE YOUR PEAK-AIR PEAK FLOW METER

Please read all the information in this package insert before using the PEAK-AIR Flow Meter. Ask your physician or healthcare professional to watch you use the PEAK-AIR Flow Meter. This will help assure that you are using it correctly.

No matter what your PEAK-AIR Flow Meter indicates, if you have signs and symptoms such as chest tightness, shortness of breath, coughing or wheezing, contact your physician or healthcare professional.

If you are unable to obtain a reading, contact your physician or healthcare professional.

Take a few moments to apply the accompanying personalized self-stick information labels (and circle-shaped decorative labels, if desired). Your physician or healthcare professional will assist you in positioning the color zone labels along the scale.

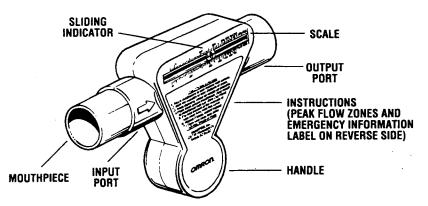


- Attach the appropriate size plastic mouthpiece to the input side of the peak flow meter, the side clearly marked with the arrow. Be sure to insert the wide end into the meter.
- 2. Make sure the sliding indicator is at the bottom (low numbers) side of the scale.
- 3. Hold the peak flow meter so that your fingers do not block the outlet opening or prevent the sliding indicator from moving the full length of the scale. It is best to grasp the meter around the round handle of the device.
- 4. While standing, inhale as deeply as possible, then place your mouth firmly around the mouthpiece, making sure that your lips form a tight seal. The mouthpiece should be inserted past the teeth.
- 5. Blow out as hard and as fast as possible a short, sharp blast. This will cause the indicator to move up the scale. NOTE: You do not have to expel all of the air in your lungs, the indicator will most likely not move after the first few seconds of the effort.
- The final position of the indicator is your PEFR (peak expiratory flow rate); make note of this value.

- Repeat steps 2 through 6 until you have completed three efforts correctly. Allow a minute or so between efforts to rest. The variation between the readings should not exceed 10%.
- Record the highest of the three readings in your PEFR readings log.
   Do not average. Also record the date, time and any current symptoms.
- Compare the highest result with your personal best and calculate the percentage (divide the current highest PEFR by the personal best PEFR and multiply by 100). Check to see which zone you are currently in (green, yellow or red). Follow your physician's advice regarding your treatment for each zone (percentage of personal bets) - green (80%-100%), yellow (50%-80%), red (0-50%).

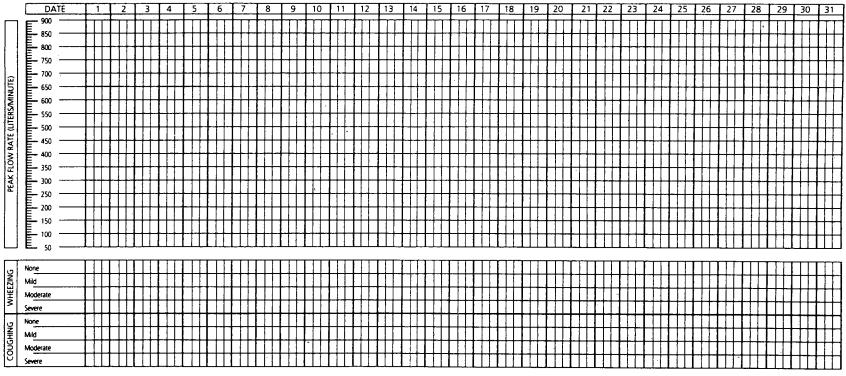
If the meter is broken, the indicator will not move when your blow into me mouthpiece. If you do not follow all the instructions for taking a peak flow measurement carefully, you may get an inaccurate result.

If your peak flow number is low, and this surprises you, contact your physician or healthcare professional.



## **Caution:**

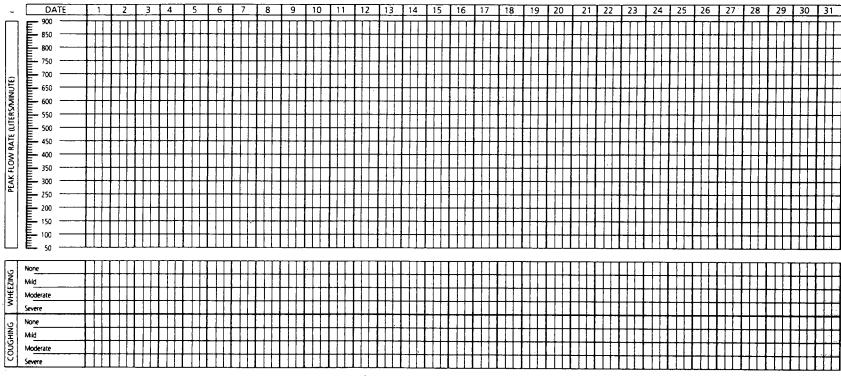
When using The PEAK Flow Meter to monitor lung conditions such as asthma, the user should be under the guidance and supervision of a physician or healthcare professional for assistance in monitoring your results. Contact this person if you note a downward change in your readings, which may indicate a worsening of your condition.



COMMENTS:

#### Caution:

When using The PEAK Flow Meter to monitor lung conditions such as asthma, the user should be under the guidance and supervision of a physician or healthcare professional for assistance in monitoring your results. Contact this person if you note a downward change in your readings, which may indicate a worsening of your condition.



COMMENTS.

# PREDICTED AVERAGE PEAK EXPIRATORY FLOW (LITERS PER MINUTE)

## **NORMAL MALES\***

AGE (YEARS	) 60°	65"	HEIGHT 70"	75°	80"
20	554	602	649	693	740
25	543	590	636	679	725
30	532	577	622	664	710
35	521	565	609	651	695
40	509	552	596	636	680
45	498	540	583	622	665
50	486	527	569	607	649
55	475	515	556	593	634
60	463	502	542	578	618
65	452	490	529	564	603
70	440	477	515	550	587

## **NORMAL FEMALES\***

AGE (YEARS	S) 60°	65"	HEIGHT 70°	75 <b>'</b>	80*
20	390	423	460	496	529
25	385	418	454	490	523
30	380	413	448	483	516
35	375	408	442	476	509
40	370	402	436	470	502
45	365	397	430	464	495
50	360	391	424	457	488
55	355	386	418	451	482
60	350	380	412	445	475
65	345	375	406	439	468
70	340	369	400	432	461

## NORMAL CHILDREN AND ADOLESCENTS<sup>†</sup>

HEIGHT (INCHES)	MALES & FEMALES	HEIGHT (INCHES)	MALES & FEMALES
43	147	55	307
44	160	56	320
45	173	57	334
46_	187	58	347
47	200	59	360
48	214	60	373
49	227	61	387
50	240	62	400
51	254	63	413
52	267	64	427
53	280	65	440

<sup>\*</sup>Leiner GC. et al. Expiratory peak flow rate. Standard values for normal subjects. Use as a clinical test of ventilatory function. Am Rev Resp Dis 88; 644, 1963. † Polgar G. Promadhat V; Pulmonary function testing in children: Techniques and Standards. Philadelphia, W.B. Saunders Company, 1971. PLEASE NOTE: The values above are averages based upon testing many patients. An individual's PEFR can exhibit wide variation.